

REMARKS

Claims 48-84 were presented for examination and were pending in this application. In an Office Action dated August 11, 2008, claims 48-84 were rejected. Reconsideration of the application in view of the above amendment and the following remarks is respectfully requested.

Statement of Substance of Interview

On August 4, 2008, the Examiner initiated a telephone interview with Applicants' representative to discuss independent claims 48, 55, 65 and 74 in view of U.S. Patent No. 6,631,386 to Arun et al. ("Arun") and U.S. Patent Publication No. 2005/0144198 to Bergstraesser et al. ("Bergstraesser"). Additionally, the possible applicability of double patenting rejections to the pending claims in view of co-pending applications 10/899,560 and 10/700,017 were discussed. The Examiner also indicated that 35 USC § 112, ¶ 1 may apply to the claimed element of "a conflict resolution procedure," although additional examination of the specification and claim element was appropriate at the time. Agreement regarding the claims in view of Arun and Bergstraesser was not reached during the telephone interview.

Response to Rejection Under 35 USC § 112, ¶1

Claims 48, 55, 65 and 74 are rejected under 35 USC § 112, ¶ 1 as failing to comply with the written description requirement. It is alleged that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention at the time the application was filed. Specifically, it is asserted that the specification does not support the claimed element of "each user input specifying a conflict resolution procedure." This rejection is respectfully traversed.

However, throughout the specification, examples are given of user input specifying conflict resolution. For example, in ¶ [0046], the specification provides that “Otherwise a manual merge is done (868) where the user is presented the details of the merge, and selects to be the same as Trunk or Branch in regards to the key (absence or same value if present), or may choose to abort. If the manual merge resolves the merge for that key (870), then that key is done, and the next key is started (854).” As illustrated in the ¶ [0046], a user selects whether merge details are from the Trunk or Branch source to resolve a conflict. This user selection of the source of the merge details resolves the conflict. This user selection of the source of merge results provides a description of a “conflict resolution procedure.” To comply with 35 USC § 112, ¶ 1, the specification does not need to recite claim elements verbatim, but need only support the claim limitations through “through express, implicit, or inherent disclosure.” *See* MPEP § 2163(I)(B). As the specification illustrates a procedure for resolving conflicts based on user selection of the source of merge details, the claimed element of “each user input specifying a conflict resolution procedure,” is supported by the specification. Pursuant to 35 USC § 112, the specification includes “a written description of the invention...in such full, clear, concise and exact terms as to enable any person skilled in the art to which it pertains...to make and use the same.” *See* 35 U.S.C. §112 (emphasis added)

Hence, reconsideration and withdrawal of this rejection is respectfully requested.

Response to Rejection Under 35 USC § 101

Claims 48-84 are rejected under 35 USC § 101 as being directed towards non-statutory subject matter. Specifically, the Office Action provides that: “the claimed subject matter provides for a final result of the method, system, computer program product of merely receiving

a plurality of user inputs responsive to identifying the plurality of conflicts, each user input specifying ‘a conflict resolution procedure,’ particularly conflict resolution procedure does not have support from the specification [page 5-11]” (emphasis in original). *See* Office Action dated August 11, 2008, pg. 6. However, as provided above, the specification does support the claim limitation of “a conflict resolution procedure,” such as ¶ [0046], for example.

Additionally, it is unclear how the claims can be construed to have a “final result” of receiving user input, as alleged in the office action. Independent claims 48, 55, 65 and 74 variously recite “generating a third version of the associative array by merging modifications from the first version of the associative array and the second version of the associative array,” so that the independent claims produce a “useful, concrete and tangible result,” the “third version of the associative array.” To generate the resulting “third version of the associative array,” the independent claims recite “receiving a plurality of user inputs responsive to identifying the plurality of conflicts, each user input specifying a conflict resolution procedure for an individual conflict;” however, the user inputs “specifying a conflict resolution procedure for an individual conflict,” are used to generate the “third version of the associative array,” and cannot be construed as the “final result” of the claims, as alleged in the office action. *See* Office Action dated August 11, 2008, pg. 6. Merely accounting for received user input when generating the “third version of the associative array” does not prevent the claims from producing a “useful, tangible and concrete result” in the generated “third version of the associative array.” Hence, claims 48, 55, 65 and 74 recite statutory subject matter, and reconsideration and withdrawal of their rejection is respectfully requested.

As dependent claims 49-54, 56-61, 66-73 and 75-84 variously depend from independent claims 48, 55, 65 and 74, claims 49-54, 56-61, 66-73 and 75-84 also recite statutory subject matter for the reasons discussed above.

The office action also alleges that claims 48-54 fail to specifically define necessary hardware elements. However, claim 48 specifically recites different components – a “first computer,” “a second computer” and a “version computer” – as well as the interconnection of these components. Hence, reconsideration and withdrawal of the rejection to claims 48-54 is respectfully requested.

Similarly, claims 65-69 recite components of an apparatus – “a data store” and a “version controller” – as well as the structural relationship between the components. Hence, reconsideration and withdrawal of the rejection to claims 65-69 is respectfully requested.

Reconsideration and withdrawal of the rejection of claims 74-83 for failing to specifically define necessary hardware elements is also requested. Claims 74-89 recite a computer program product, and clearly specify that the computer program product comprises “a computer readable medium storing computer executable code for implementing version control on an associative array.” The necessary hardware component, the “computer readable medium,” applicable to claims 74-89 is specified in the claims, contrary to the assertion in the Office Action.

Response to Double Patenting Rejection

Claims 48-84 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 24-28, 30-34 and 42-45 of co-pending Application No. 10/899,560. This rejection is respectfully traversed. It is indicated in the Office Action that a timely filed terminal disclaimer may be used to overcome the rejection. *See Office*

Action dated August 11, 2008, pg. 7, ¶ 9. In the event that the rejection of claims 48-84 under the judicially created doctrine of double patenting is maintained, it is requested that this rejection be held in abeyance until it is determined that there is allowable subject matter, at which time a terminal disclaimer will be filed.

Claims 48-84 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14, 16 and 18-21 of co-pending Application No. 10/700,017. This rejection is respectfully traversed. It is indicated in the Office Action that a timely filed terminal disclaimer may be used to overcome the rejection. *See* Office Action dated August 11, 2008, pg. 7, ¶ 9. In the event that the rejection of claims 48-84 under the judicially created doctrine of double patenting is maintained, it is requested that this rejection be held in abeyance until it is determined that there is allowable subject matter, at which time a terminal disclaimer will be filed.

Response to Rejection Under 35 USC § 103(a)

In the 4th paragraph of the Office Action, Examiner rejected claims 48-61, 63-71, 73-80 and 82-84 as allegedly being unpatentable over U.S. Patent No. 6,631,386 to Arun et al. (“Arun”) in view of U.S. Patent No. 6,415,299 to Baisley et al. (“Baisley”). This rejection is overcome in view of the amended claims.

Claims 48, 55, 65 and 74 variously recite “generating a third version of the associative array by merging modifications from the first version of the associative array and the second version of the associative array and resolving a plurality of conflicts between the first version of the associative array and the second version of the associative array by resolving a plurality of conflicts between the first version of the associative array and the second version of the associative array by receiving a plurality of user inputs responsive to identifying the plurality of

conflicts, each user input specifying a conflict resolution procedure for an individual conflict.”

(emphasis added)

Hence, the amended claims recite generating a third version of an associative array which incorporates changes from a first version of the associative array and a second version of the associative array. Generation of the third version of the associative array also resolves a plurality of conflicts between the first version of the associative array and the second version of the associative array by receiving a plurality of user inputs. Each user input specifies a conflict resolution procedure applied to an individual conflict. Resolving a plurality of conflicts responsive to a plurality of user inputs each identifying a conflict resolution procedure for an individual conflict beneficially allows greater user control over resolution of individual conflicts. For example, a first user input may specify that a first conflict be resolved by including data from the first version of the associative array in the third version of the associative array. Subsequently, a second user input may specify that a second conflict be resolved by including data from the second version of the associative array in the third version of the associative array. Hence, using a plurality of user inputs to resolve a plurality of conflicts beneficially allows independent resolution of individual conflicts between a set of two versions, allowing different each conflict to be resolved by selecting data from different versions. This allows increased customization of the third version of the associative array to include different data values from each version of the associative array.

Arun does not disclose at least the claimed element of “resolving a plurality of conflicts between the first version of the associative array and the second version of the associative array by receiving a plurality of user inputs responsive to identifying the plurality of conflicts, each user input specifying a conflict resolution procedure for an individual conflict.” Rather, Arun

describes a database version control system where a database table includes “at least some” records having “a version control field including version control information.” *See* Arun, col. 3, lines 58-61. Regarding the resolution of conflicts between versions, at most Arun describes a conflict resolution operation in which a user checking in a checked-out record version determines whether the checked-out record version or a record version stored in the database is preserved for later use. *See* Arun, col. 3, lines 17-20. Specifically, when a conflict exists, the user provides only a single user input which selects a single record version to resolve the conflict. *See* Arun, FIG. 6, item 153 and col. 17, lines 59-65. After this single user input, only the record version identified by the single user input survives after the conflict resolution operation, so all data from the selected version is maintained while all data from the non-selected version is discarded. *See* Arun, col. 3, lines 23-26. Thus, for one or more conflicts between a first record version and a second record version, Arun merely provides a single user input that allows the user to choose between (a) resolving all conflicts between the two record versions with data from the first record version or (b) resolving all conflicts between the two record versions with data from the second record version. *See* Arun, FIG. 6 and FIG. 6A. Arun only allows for an additional user input if conflicts exist between one or more additional sets of record versions, in which case the single user input process repeats for each set until no conflicts exist between any set of two or more record versions. *See* Arun, FIG. 6A, item 158 and col. 8. Hence, Arun does not allow a user to individually resolve multiple conflicts by selecting data from different versions using user input for each conflict encountered, but rather uses a single user input to specify the version used to resolve all conflicts encountered. Therefore, Arun does not disclose at least the claimed element “resolving a plurality of conflicts between the first version of the associative array and the second version of the associative array by receiving a

plurality of user inputs responsive to identifying the plurality of conflicts, each user input specifying a conflict resolution procedure for an individual conflict.”

Baisley does not remedy the deficient disclosure of Arun. Rather, Bergstraesser merges a source version of a model into a target version of the model in an object oriented repository. *See* Baisley, Abstract. A collection of versions occurring in a history of the source version is used to build a first list while a collection of versions occurring in a history of the target version is used to build a second list. The first and second lists are combined and either the first list or second list is identified as the non-preferred history and the first list, including the history of the source version, is added to the history of the target version. Baisley, col. 2, lines 10-23. Conflicts in the dual list of source version history and target version history are reported and resolved by adding the target version to a list of end versions on each conflicting attribute value in the non-preferred history. Baisley, col. 2, lines 25-27.

Baisley characterizes a conflict as occurring when the same object is modified in both lines, source and target, of development. Baisley, col. 5, lines 37-41. However, rather than receive “a plurality of user inputs responsive to identifying the plurality of conflicts, each user input specifying a conflict resolution procedure for an individual conflict,” to resolve conflicts, Baisley performs a predetermined conflict resolution procedure depending on the type of conflict. Baisley, col. 6, lines 16-23; Table II (at col. 6, line 25 to col. 7, line 15). For example if an object is deleted from one version and the object’s attribute is given a value in the other version, the object remains deleted. User input specifying a conflict resolution procedure for the conflict is not received, but a predefined action is taken to remedy the conflict. Baisley, col. 6, lines 27-32. As an additional example of conflict resolution in Baisely, if a single valued

attribute is unset in one version and set to a new value in the other version, the new value is retained in the merged version. Baisley, col. 6, lines 36-42.

Hence, Baisley relies on predefined actions to resolve conflicts between different versions during a merge, and does not receive “a plurality of user inputs responsive to identifying the plurality of conflicts, each user input specifying a conflict resolution procedure for an individual conflict,” as claimed. The predefined actions in Baisley limit the ability of a user to control the source of the data used to resolve a conflict between versions by specifying execution of predefined actions to retrieve data from a version to resolve a conflict. At most, Baisely allows a user to select a preferred version of development, which does not allow for individual resolution of conflict, but sets a global parameter for the conflict resolution rules. After identifying a type of conflict, Baisley automatically applies a predefined conflict resolution rule associated with the conflict type to retrieve data from a version for inclusion in the merged version. Hence, rather than allow a user to individually select the version providing the data for the merged version, Baisley automates the data selection, removing user input from the conflict resolution process. There is no receipt of user input to resolve conflicts between versions in Baisely, much less “receiving a plurality of user inputs responsive to identifying the plurality of conflicts, each user input specifying a conflict resolution procedure for an individual conflict,” as claimed.

Thus, neither of the cited references, taken alone or in combination, teaches or suggests the claimed invention. Therefore, amended independent claims 48, 55, 65 and 74 are patentably distinct from the cited references, both alone and in combination, and withdrawal of the rejection is respectfully requested.

Claims 49-54 depend from claim 48, so all arguments advanced above with respect to claim 48 are hereby incorporated so as to apply to claims 49-54. Claims 56-64 depend from claim 55, so all arguments advanced above with respect to claim 55 are hereby incorporated so as to apply to claims 56-64. Claims 66-73 depend from claim 65, so all arguments advanced above with respect to claim 65 are hereby incorporated so as to apply to claims 66-73. Claims 75-84 depend from claim 74, so all arguments advanced above with respect to claim 74 are hereby incorporated so as to apply to claims 75-84. Therefore, claims 49-54, 56-64, 66-73 and 75-84 are patentably distinct from the cited references, both alone and in combination, and withdrawal of the rejection is respectfully requested.

CONCLUSION

In sum, Applicants respectfully submit that claims 48-84, as presented herein, are patentably distinguishable over the cited references (including references cited, but not applied). Therefore, Applicants request reconsideration of the basis for the rejections to these claims and requests allowance of them.

In addition, Applicants respectfully invite the Examiner to contact Applicants' representative at the number provided below if the Examiner believes it will help expedite furtherance of this application.

Respectfully submitted,
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